



**Base Realignment and Closure
Program Management Office West
1455 Frazee Road, Suite 900
San Diego, California 92108-4310**

**C ^{fffff} | _{ff} N .N62473-07-D-3211
CTO N .0018**

**FINAL
RADIOLOGICAL
REMOVAL ACTION COMPLETION REPORT
Revision 2**

December 16, 2011

**DCN: ECSD-3211-0018-0181.R2
Revision 2 to ECSD-5713-0072-0017.R1**

**PARCEL D-2
HUNTERS POINT NAVAL SHIPYARD
SAN FRANCISCO, CALIFORNIA**

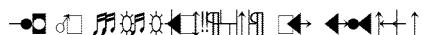
EXECUTIVE SUMMARY

I JK L ~~M~~ MOKPQST KUSWSIK XQYZ [O\ X] ^_RK SK^ I KSRQI K J abcd' MS/ PRKPQRK SJ_e RKY_eK^ f Q_VgMh_ 'Qf KT VYQj i 'SVU b VT PgSKVUf KPVR[f i b f] WRj QR KgOK QSmnLSRRej V_USX QYQg NJ_PZQR^ [mj XN] MI J_e f i b f ^Ke' RoKe QU^ enT T QRpKe SIK j QR Kg OK q n_g^_Uh r st u_UQg NSQSe NnRkZ [uNN] QU^ eS/RT ^RQU QU^ eQU_SQZ eKv KRRQ_VgMh_ 'Qf RKT VYQj Q SVUe S/ VQ_gSQSK SIK PRKPQGSVU WQUV WRSIKRQ SVUf K VR WOK_e_VU [f \ O] QU^ enPPVRSI KWSIKRj RPVVeK^ j gQUMI JK uNN QU^ RKT VYQj Q SVU Q SY_SK e v KRK PKRWRT K^ nU^KRT ngSPgK 'VUSQ Se QU^ SQeW VRKRe QU^ v KRK 'VU^n' SK^ _U Q 'VR QU^ K v SI RKhngQS/RZ RKhn_RKT KUSM I JK PnRPVVeK WWSI_e f i b f v Qe S/ enT T QRpKS IKRkengs WWSIKRQ_VgMh_ 'Qg v VRw Q SY_SK e PKRWRT K^ WRj QR KgOKl S/ PRVSK SSISK Phog_ JKQSIC v KdOKC QU^ SIK KUY_RVUT KUSWRT Q S1Qj VR PVSKUSQj RKGQKe W RQ_VgMh_ 'Qg 'VUSQT_UQS May' KPS_U RKGQS_VU S/ RKhngQS/RZ ePVeQj VRK 'Q/QB^ eV_g^KRYK^ VRWT RKT VYQj WWSIKj QR KgOKl eS/RT ^RQU QU^ eQU_SQZ eKv KRec SJ_e RKY_eK^ f i b f ^VKe UVSQ^K RKe 'JKT '_Qg 'VUSQT_UQS_VU QU^ ^VKe UVS_U g^KVRQWKR SQZ VSIKR^K Ke_hUQSK^ mj XN PCR KgM

I JK mj XN e_SK gKe KUSRKz v _SI_U SIK 'VRPVRSK oVnU^QRKe WWSIK b_SZ QU^ b VnUSZ WNWQU uRQU'_e'Vc b Q_WRU_QM I JK mj XN e_SK KU'VT PGeKe QPPRiy_T QSKz r zr Q RKe_U'g^_Uh QeVns zsf_ Q RKe VU gQU^ e_SiQSK^ VU Q I KT_gKgUh PRVt VUS/RZ PRV/K SUh eVnS1KQeS/ QR^ _US/ NQU uRQU'_e'V q QZM I JK RKT QU_Uh zt I Q RKe 'VUeSSISK SIK Q|Q KUSWMSVRK QRQeM I JK PRVPKRS QeV'_QSK^ v _SI j QR KgOKl VRh_UQg v QeV'_QSK^ v _SI j QR Kgq c QU^ SIK RKGQS^ eS/RT ^RQU QU^ eQU_SQZ eKv KRRKT VYQj Q SVU Q SY_SK e v KRK PKRWRT K^ PRVRS/ SIK O\ X}e ^Ke_hUQS_VU W ~ VRw i RQsl Qe j QR KgOKl Mi PPRViy_T QSKz MI Q RKe_U QRQe j QR KgOKl _e g^_QSK^ WWSI W j QR KgÄ QgUh NPKQRi YKuhK QS mj XN QU^ KU'VT PGeKe q n_g^_Uh r st c_Se QeV'_QSK^ QePJQS PQw_Uh QRQeC QU^ S/ V VPKLUK WMSeJK^K eM

q QSK^ VU SIK RQ_VgMh_ 'Qg VPKRQSVUQj J_eS/RZ ^Ke' RoK^ _U SIK WUQj m_eS/R'_Qg f Q_VgMh_ 'Qg i eeKeET KUS A VgnTK d [mf i] PRKPQRK^ oZ SIK XQYQg NKQ NZeSKT e b VT T QU^ _U 1Qcz [Xi A Nai 1Qcz] QU^ e_SKePK_W_UVKesHSQSYK ^QSK SIK O\ X ^KSRT_UK^ S1QS RQ_VQ SYK 'VUSQT_UQS_VU _U eV_g^_QSK^ ^KoRe QS mj XN RKhn_RK^ Q RKePVUeK Q SVUM I J_e ^K_e VU_e ^V_nT KUS^ _U SIK WUQj q QSKv ^Kf Q_VgMh_ 'Qf KT VYQj i 'SVUe i 'SVUé KT VRQJ^ nT [O\ X 1Qc{] MI JK eS/RT ^RQU QU^ eQU_SQZ eKv KRRKT VYQj Q SVUe v KRK PKRWRT K^ _U Q 'VR QU^ K v SI SIK RKhn_RKT KUS WWSIK b VT PRKJ KUe_YK a UY_RVUT KUSQf KePVUeKc b VT PKUeQS_VUc QU^ N_Q_gSZ i 'SQU^ SIKXQS_VUQj _gQU^ mQgR Vhe NhoesQj Kej VgnSVU b VUS_UhKU Z j gQUM

I JK PRKeKUS^QZ 'VUWhnRQS_VU WWSIK mj XN eS/RT ^RQU QU^ eQU_SQZ eKv KReZeSKT e_e SIK Rkengs WQU KYVgnSVUQZ PRV' KeeMI JK 'VT o_UK^ eZeSKT e hRKv _U eK SVUe QU^ SIKU nU^KRv KUSQeKRKe WkPQGS_VU PRV/K S/ PRV^_K WR_UeQS_VU W^K^ _QSK^ eQU_SQZ eKv KRP_P_Uh QU^ PhT P eSS_VUe S1QS v Vng^ ^e' JQRK KWgIKLUS WMS_SKM b VT PgSK eKPRQSVU WWSIK 'VT o_UK^ eZeSKT e v Qe UKYKRQ J_KYK^ c QU^ _UePK' SVUe JQYK RKYQK^ S1QS' Rveek' VUUK' SVUe T QZ eSggKy_eSMOnKS/



!

"#& %#&%#&, -).%& -\$1)- 201\$, 201\$, 56
70% 80%
:\$037450%086-72636
81=AB1-8961DEPHD136
1G=(5#E)

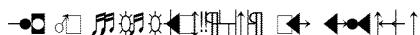
S IK K Y V g n S V U Q R Z U Q S I K W V S I K e K P Q R Q S V U P R V ' K e e C R Q _ V g h _ Q J ' V U S Q T _ U Q S V U V R V T S IK e Q T K e V h R K e T Q Z J Q / K _ T P Q S K ^ S IK m j X N e S / R T ^ R Q U Q J ^ e Q U _ S Q R Z e K v K R e Z e S K T e P P _ U h Q J ^ V S I K R ' V T P V U K U S M

q n g ^ U h r s t Q J ^ S IK e S / R T ^ R Q U Q J ^ e Q U _ S Q R Z e K v K R e Z e S K T e v K R K _ K U S W K ^ _ U S IK m f i [X i A N a i I Q C z] Q e R Q _ V g h _ Q J Z _ T P Q S K ^ M I J K m f i g e S K ^ S IK R Q _ V U h ' g ^ K e V V V U K R U Q e ' K e n T k s t U c R Q _ n T K l { c Q J ^ e S R V U S n T k a C M

q n g ^ U h r s t _ e Q I { I k e x n Q R K K W V S o Z I { I k e x n Q R K K W V S e W h R e S / R Z c R K _ U M R K ^ K V U R K S K c V Q S R A M K ^ v Q R K J V h e K M i e P J Q g S P Q R w U h Q R K Q e e n R R h U ^ q n g ^ U h r s t V U S I R K e ^ K e M I v V V P K U K M R / U S e J K ^ e Q R K g / Q S K ^ V U S I K v K e S e ^ K W q n g ^ U h r s t M b n R K U S Z c q n g ^ U h r s t _ e Y Q Q U S M

f Q _ V g h _ Q j e n R / K Z e v K R K P K R M R T K ^ W R q n g ^ U h r s t _ U I Q C { M I J K q n g ^ U h r s t ^ R Q U g U K e Q J ^ Y K U S g Q S V U e Z e S K T v K R K R Q _ V g h _ Q J Z e n R Y K Z K ^ M X V ' V U S Q T _ U Q S V U v Q e W h U ^ ^ n R U h S I K e K e n R Y K Z Q S Y _ S K e M d J Q ^ S V U c R Q _ V g h _ Q j e n R Y K Z e v K R K P K R M R T K ^ V U S I K _ U S K R V R W q n g ^ U h r s t M I J K ' V g g K S K ^ ^ Q S Q v K R K R K Y _ K V K ^ S / ^ K S K T _ U K v J K S I K R _ U M K e S h Q S Y K g Y K g e J Q ^ o K K U K y ' K K ^ K ^ M X V e Q T P g K T K Q e n R K T K U S W R Q P J Q V R o K S Q K y ' K K ^ K ^ S I K R K g Q e K ' R S K R Q M N T Q g Q R K Q e W K g K Y Q S K ^ h Q T T Q Q S Y _ S Z v K R K U V S K ^ ^ n R U h S I K e n R Y K Z Q S Y _ S K e M i ^ ^ S V U Q g _ U M K e S h Q S V U ^ ^ U V S g V / Q S K Q U Z ^ _ e R K S K e V h R K W R Q _ V Q S Y K T Q S R Q e M q K ^ Q e K S I K _ U e S R T K U S e ne K ^ W R S I K h Q T T Q T K Q e n R K T K U S e T Q Z _ U ^ _ Q S K P J V S / U e V R V T T Q U Z ^ R K ^ S V U e Q J ^ U V S K y ' g e Y K g Z V R V T S I K e n R Q K W V S I K T Q S R Q e o K U h e n R Y K Z K ^ c S I K K g K Y Q S K ^ h Q T T Q T K Q e n R K T K U S e g w K g Z ' Q J o K Q S R o n S K ^ S / V U e S R i ' S V U T Q S R Q e Q J ^ S I K h K V T K S R Z W S I K e P K ^ W e n R Y K Z n U S V R R V T M q Q e K ^ V U S I K Q U Q Z e e W S I K ' V g g K S K ^ W K g ^ ^ Q S Q Q J ^ e U ^ K S I K R v Q e U V R K e ^ n Q g R Q _ V Q S Y _ S Z h R Q S K R S I Q U o Q w h R / h U ^ ' V U K U S Q S V U e c q n g ^ U h r s t v Q e R K ^ V T T K U ^ K ^ W R n U V U ^ S V U Q g n U R K e S R ^ S K ^ R K g Q e K M b V U M R T Q S V U R Q _ V g h _ Q j e n R Y K Z e P K R M R T K ^ o Z S I K b Q g W R U Q O K P Q R T K U S W j n o g ^ m K Q S I [b O j m] _ U q n g ^ U h r s t e n P P V R S K ^ S I _ e R K ^ V T T K U ^ Q S V U M I J K b O j m ' V U g n ^ K ^ S I Q S S I K o n g ^ U h v Q e Q ' K P S Q g K W R n U R K e S R ^ S K ^ R K g Q e K V U i P R g s c l Q C r M

I J K j Q R K g O K e S / R T ^ R Q U Q J ^ e Q U _ S Q R Z e K v K R e v K R K R K T V Y K ^ _ U e S K e o K h _ U U _ U h _ U X V Y K T o K R I Q C { M I J K R K v K R K V Y K e Q U _ S Q R Z e K v K R g U K e Q J ^ I s e S / R T ^ R Q U g U K e Q e V / Q S K ^ v S I j Q R K g O K M I J K R Q _ V g h _ Q J ^ K S Q g e W S I K e S / R T ^ R Q U Q J ^ e Q U _ S Q R Z e K v K R R K T V Y Q g v V R v ' V T P g K S K ^ W R j Q R K g O K l v K R K P R V Y ^ K ^ _ U K Q J W S I K W U Q y K R e V U e W S I K N h R Y K Z L U S j R M K ^ S f K P V R [N L j f e] W R I R K U J N h R Y K Z L U S [N L] k t s c k t l c k t z c k t l c k t r c k s t z c Q J ^ k s t l M I J K h V Q g W S I K N L j f e v Q e S / ^ K T V U e S P Q K S I Q S ^ K U S W K ^ R K e ^ n Q g R Q _ V Q S Y _ S Z g Y K g e U e ^ K S I K K y ' Q / Q S K ^ S R K U J K e Q J ^ v S I _ U S I K o Q w M g T Q S R Q g T K K S S I K K e S Q g e J K ^ R K g Q e K ' R S K R Q M I J K b O j m R K x n K e S K ^ S I Q S S I K O \ X T V ^ V Z f K Y e V U s / S I K W U Q j Q R K g O K l f i b f S / R K M K S ' J Q U h K e S / S I K _ U ^ Y ^ n Q g N L j f ' V U S K U S e Q J ^ ^ V e K Q J ^ R e v T V ^ K g U h P Q Q T K S R e R K x n R K ^ o Z S I K R K h n g Q S V R Z Q n K U _ K e M I J K e K ' J Q U h K e v K R K Q h R K K ^ S / o Z S I K O \ X Q S R S I K _ U ^ Y ^ n Q g N L j f e Q J ^ S I K j Q R K g O K l f i b f v K R K W U Q p K ^ Q J ^ R K Y _ e K ^ M I J K _ U M R T Q S V U c ' V U g e V U e Q J ^ R K ^ V T T K U ^ Q S V U P R K e K U S K ^ _ U S I _ e f i b f R K M K S S I K e K N L j f R K Y _ e V U e Q J ^ ^ V e K T V ^ K g U h R K e g e M



Ö

"#& %#& #& , -). %& \$1)- 20\$, 20\$. 56
72, 80\$
:\$037,50% 08,72,66
81=AB1-8961DEPBDI36
1G=(5#E)

I JK eKYKU Ky' QYQB^K SKU J enRKZ nU_S^e ^Ke_hUQ^K v _SI_U j QR Kg OK! PRT QRgZ 'VUe_SK^K VW
eJQgW eSVRT ^RQU gUKe g^V QB^K oKS^e KKU I QU^ si WMSokgW hRV/nU^ enRQgK QU^ VUgZ WYK
eJQgW eQU_SQZ eKv KRgUKeMi PPRV_yT QBgZ scz z 'no_ ZQR^e W&V_gV Qe Ky' QYQB^K VRT SIK
j QR Kg OK! SKU JKec_U^gr^Uh QeVnSz! 'no_ ZQR^e W&V_gRKT VYK^a VRT VUK SKU J ekHt KUS_U
NL kt! QU^ VUK SKU J ekHt KUS_U NL kst! SIQS v Qe ^_ePVek^a W&Qe gW kgKYkg RQ_yVQ SYK v QeSK
[N~f ~]c onS v Qe UVS 'VUSQ_UQB^K M \ Uz t WSIK sC! Ü gUKQRWMSWP_PK Ky' QYQB^K v Qe
^_ePVek^a W&Qe N~f ~ ^nK S/ kgKYQB^K eSS^e T KQenRKT KUSMI JK RKT QU_Uh T QUVgKe QU^ P_PK
RKT VYK^a VRT NL kt sc kt l c kt zc kt! c QU^ kt r v KPK ^_ePVek^a W&Z SIK O\ X}e UMURQ_yVg/h_ 'Qg
v QeSK 'VUSQ S/RM ~ _SI SIK 'VU nRKU K WSIK O\ Xc RQ_yVg/h_ 'Qg enRKZ Q SY_SK_e v KPK UVS
PKRWRT K^a VU P_PK VRT QUVgKe Ky' QYQB^K VRT NL kst z VRNL kst! ^nK S/ SIK g_T SK^a xnQUSZ
RKT VYK^a QU^ S/ KyPK_y SK SIK v VRw Q SY_SK_e Mi JK zzC gUKQRWMSWP_PK QU^ WhRT QUVgKe
RKT VYK^a VRT NL kst z QU^ NL kst! v KPK PgQ K^a ^_R_yS_y US/N~f ~ o Ue WRWmke SK^a ePVeQgM

f KgQS~~Y~~KgZ ejVRS eKhT KU~~S~~ WWSIK eS/RT ^RQU g~~U~~Ke RKT QU QSj QR Kg OK oK' Qneka s] SK_R
RKT VYQv Vng^ Q YKR~~e~~KgZ QM~~S~~ SSIK_U~~X~~hRSZ Wq n_g^ Uh r st äl] SKZ 'Vng^ UVSoK RKT VYK^ ^nK
S/ v VR~~w~~KReQMSZ _eenKeä Vrt] SKZ v KR~~K~~ v _S₁_U s~~C~~ W~~M~~SK on_g^ Uh V~~Q~~K VRVSIKR~~Voe~~SR₁ SV_Ue
[e~~S~~QR₁ QZec g/Q^ Uh ^V' wec Q| Q KUS PRVPKRSZ R~~S~~QU₁Uh v Q~~o~~ec VR VYKR~~J~~Quhe] M q Qk^ VU SIK
RQ₁ Vg/h_ 'Q₁J eS/RZ Wq n_g^ Uh r st c S~~I~~KR_K e UV PVS~~K~~USQ₁WR~~R~~Q₁ Vg/h_ 'Q₁ 'VUSQT_UQS_US/ JQ_K
oKKU S~~Q~~ueW~~M~~R~~K~~^ V~~W~~T SIK on_g^ Uh S/ SIK R~~A~~W~~A~~ RQ₁ue QU^ V~~W~~T SIKR_K S/ SIK eS/RT ^RQU eKv K~~R~~eM
I JK~~R~~W~~R~~Kc SIK O\ X ^KS~~K~~RT _UK^ S~~I~~QS~~R~~W~~A~~ RQ₁ P_PKe Q~~R~~K U~~M~~T PQ SK^ QU^ T QZ oK g~~K~~S_U PgQ K
v _S₁_U SIK s~~C~~KWSeQMSZ on W~~M~~RMNS/RT ^RQU QU^ eQ₁ S~~R~~Z eKv KRP_PUh g~~Q~~KR~~O~~e v K~~R~~K RKT VYK^ S/
v _S₁_U SIK s~~C~~KWSeQMSZ on W~~M~~RenFR/nU^ Uh SIK e~~S~~RI 'S~~I~~KR_K VRVSIKR~~Q~~ev^ _Q~~B~~^ VoeSR₁ SV_UeM~~d~~UV
RQ₁ Vg/h_ 'Q₁ 'VUSQT_UQS_US/ v Q~~e~~ PRKeKU~~S~~ SIKU SIK KyPVek^ KU^e WWSIK g~~Q~~KR~~O~~g v KR_K 'QPPK^ VR
Pg~~h~~hhK^ QU^ SIK RKT QU Uh PVRSV_Ue dK~~S~~ U PgQ KM

NS/RT ^RQU_SRU_ J g_UKe g/ QSK^ VUSIKUVSI e^KWq n_g_Uh r st v KRKUVSKy' Q/QSK^ oK' QneKW
Sj_K PRV_T_SZ S/ SIK NQJ uRQU_e' V f K^KYKg/PT KUS i hKU' Z [Nuf i] RKSQU_Uh v Qg SjQS
ekPQPSKe j QR KgOK VRWT SIK Q|Q KUSNuf i PRVPKRSZ [WRT KRZ j QR Kg i cv J_J v Qe RkgQSK^
WRnURKeSR_ SK^ neK] QJ^ S/ PRKYKUSnU^KRT _U_Uh SIK q n_g_Uh r st g/VQ_Uh ^V' wM I JKeK eS/RT
^RQU_SRU_ J g_UKe QRK QeV' _QSK^ v _Sj_ KSjKRSjK on_g_Uh eS/RT v QSKRRWW^RQUe VRSIK eS/RT
^RQU g_UKe KT QJQS_Uh VRWT SIK UM_U T PQ SK^ Q|Q KUSNuf i PRVPKRSZM dU Q^_SVUc RkgQSYkGz
eJVRSeKhT KUS WsS/RT ^RQU g_UK P_P_Uh v KRKUVSKy' Q/QSK^ VUSIKeVnSjckQesQJ^ v KeSe_Ke VW
q n_g_Uh r st ^nRUh SIK eK RKT VYQg Q SVUeM I JKeK RKe_ nQg eS/RT ^RQU ekHT KUS QRK g/ QSK^
v _Sj_U SIK sCKWMSonWMRpVUK QJ^ 'Vng' UVSoK RKT VYK^ v _SjVhSQMK^ Sj_Uh SIK _UsKhRSZ WsSjK
eSj_ 'SjRKMj JKRKengs WsSjKRQ_Vg/h_ QgenRYKZe PKRWRT K^ VUekHT KUS WsSjKeS/RT ^RQU g_UKe
SjQSv KRKKy' Q/QSK^ ^nR_Uh SIK RKT VYQg Q SVUenPPVRSsIKO\ Xje 'VUSKUSVU SjQSUV RQ_Vg/h_ Qg
' VUSQT_UGSVU ePRKeKUS USIK eS/RT ^RQU P_KeKHT KUS RKT QU_Uh _UPgQ KM

\ Ugz Wyk eQu_SQZ eKv KrSKU J g_UKe QRK QeV_QK^ v_Si j QR Kg Ok Qu^ VuZ tç g_UKQRWMS RKT QU_U PgQ K WgjW Uh SIK RKT VYQg Q SVUeM NQU_SQZ eKv KRgUK Ç{ KoSl Koçksl KT QUQBe

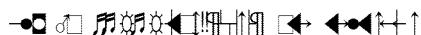
VWRT SIK KQeSKRU e^K Wq_n_g^_Uh r st c QU^ Ç{ kOsl Içkr O KySKU^e SW QR^ SIK elvnsIKQeSVWRT q_n_g^_Uh r st SW QR^ NL kstl QU^ É QUVgKÉ ml ÇÜM i PPRV_T QKgZ I sÇ g_UKQRVMKSWSIK eQU_SQZ eKv KRSKU J g_UKe v Qe RKT VYK^c QU^ QoVnStÇ g_UKQRVMKSRSKT Q_Ue_U PgQ KWggW_Uh SIK RKT VYQgQ SVUM i PPRV_T QKgZ sÇ g_UKQRVMKSWSIK_SQZ eKv KRg_UKÇ{ kOsl Içks\ RKT Q_Ue_U PgQ KQSj QR KgOKl oK QneK WWSR PRV_T SZ S/ SIK on_g^_UhäJW KYKR srÇ g_UKQRVMKSWSI_e g_UK v Qe RKT VYK^c RQ_VgVh_Qu^ enRvKZ^ QU^ RgQeK^ WR VMle_SK ^_ePVeQg VR Rk^ Z' g_UhC QU^ ^_ePVeK^ WWSRle_SK Qe UVURQ_VgVh_Qu^ QeSKMq QeK^ VUSIKRQ_VgVh_Qu^ enRvKZ Rkenges SIKO\ X 'VU^g^K^ SIQS SIK eKhT KUS WWeQU_SQZ eKv KR g_UK Ç{ kOsl Içks\ RKT Q_Uh_U PgQ K v Qe UMUT PQ SK^ M i gSVnhJ QoVnSI Ç g_UKQRVMKSWSIK_SQZ eKv KRg_UKÇ{ kOsl Içkr O RKT Q_Ue_U PgQ KVUj QR KgOKl WggW_Uh SIK RKT VYQgQ SVUcSIK_PPKRlUe QSQ^_QhVUQg v SI_U sÇ WMSW SIK on_g^_Uh VQ K QU^ 'QUVSoK RKT VYK^ eQmgZ VRv SIvhs^QT Qh_Uh SIK eSR' SIRKM i oVnStÇ g_UKQRVMKSWSI_e eQU_SQZ eKv KRg_UK v Qe RKT VYK^ QU^ RQ_VgVh_Qu^ enRvKZ^ MI JKf Q_QSVU NQMSZ\ WWSRKRgQeK^ SIK eKPKPKP_K Ke oQeK^ VUSIKenRvKZ Rkenges Qe UMUT PQ SK^ v QeSKM

f KY_eK^ ^VeKT V^Kg_Uh v Qe PKRWRT K^ WRKQ J WSISIK eKYKU SKU J enRvKZ nU_S ne_Uh SIK^KWQgs RKe^KUSQg VWT KR e' KUQRV S/ 'Qu^ngQK SIK_R UKS RKe^_nQg ^VeKM I JK Rkenges WWSIK RKY_eK^ T V^Kg_Uh KMWR^_U_Qu^ SIK SIQS SIK PVSKUSQg nPPKRkoVnU^ QuhQg ^VeK VRg_WST K 'Qu^ KR Rew S/ v VRvKR eV RKT KT oKe WSISIK Phog_ Qe QRkengesWvKyPVenRke S/ RKe^_nQg RQ_VQ SYKT QK_RQ_UeVg _ez MzÜ T gg RKT e PKRZKQRv SI QU_U RQeK^ PVSKUSQg 'Qu^ KRRRew WÜIMI á_u sçäM

d) Q^_SVU S/ ^VeK QU^ Rew T V^Kg_Uh KMWR^ SIK KUY_RVUT KUSSgQe gW Qe RQeVUQgZ Q J_KYQgK [i Ñi f i] PRV' Kee v Qe _T PgKT KUSK^ WRKQ J WSISIK eKYKU SKU J enRvKZ nU_S QeV'_QK^ v _SI j QR KgOK M I JK i Ñi f i PRV' Kee enPPVRSK^ SIK Rkenges WWSIK ^VeK T V^Kg_Uh KMWR^ QU^ Rk^ VTT KU^ QSVUeWRnURKeSR' SK^ RgQeK WSISIKSKU J enRvKZ nU_S QeV'_QK^ v _SI j QR KgOK M

g QeK^ VUSIK Rkenges WSISIK eSYRT ^RQ_U QU^ eQU_SQZ eKv KRRKT VYQgQ SVUcRKe^_nQg ^VeK QU^ Rew T V^Kg_Uh KMWR^ SIK _T PgKT KUSSgVU WSISIKi Ñi f i PRV' Kee PRKeKUSK^ _U SIK NL j f ec QU^ oQeK^ VUSIK Rkenges WSISIK q_n_g^_Uh r st uNN QU^ 'VU^nRKRUKoZ SIK b Oj m WR_S eURKeSR' SK^ RgQeK SIKO\ X JQeT KS_S eSK^ RKT VYQgQ SVUvoK SYKe S/ PRvSK^ SPPhog_ JKQgSI QU^ v KgWTK QU^ SIK KUY_RVUT KUS QU^ S/ PRK^g^K PVSKUSQg KyPVenRK S/ WSIRK RKe^_KUg VRv VRvKR eM I JK RKY_eK^ NL j f e ^KT VUeSK SIQS^KUSWK^ RKe^_nQg RQ_VQ SY_SZ gYKge_Ue^K SIK Ky' Q/QK^ SKU JKe QU^ v _SI_U SIK VYKRonRvKU VRKy' Q/QK^ eV_ge QU^éVR_T PVRSK^ WgneK^ Qe oQ wWg T KKS SIKKeSSoGeJK^ RgQeK^ RSKRQM

I JK O\ X JQeT KS_S eSK^ RQ_VgVh_Qu^ hVQe QU^ VoK SYKe WRj QR KgOKl MI JK_UWRT QSVU PRV^_K^ _U SI_e f i bf c SIK eKYKU NL j f ec QU^ SIK q_n_g^_Uh r st uNN Rkenges enPPVRSISIKO\ X }e 'VU^gne_VU SIQSj QR KgOKl _e RQ^Z WRnU VU^ SVUQg nURKeSR' SK^ RQ_VgVh_Qu^ VgWKK RgQeKMI JK 'VU^gne_VUe PRKeKUSK^ _U SI_e f i bf enPPVRSISIK PRKPCQSVU WQQUV WRSIKRQ SVUf \ O QU^ SIK WSIRKj R/PVek^ j gQJM



a

"\$& %•, -). %•, 2017, 56
72, 809
:\$037,50%•, 2017, 56
81=AB1-896DEPHD136
1G=(5E#

êëí ãé i i êñ óãõõõ i õõmû i ùü† i ç i ù£ £ öüç

I JK PQ_VgMh_Qg v VRw PKRWRT K^ WR NL kt z [U'gne_YK WWSIK SKU J QU SK QeeV'_QK^
VYKRnR KUT QBRQg neK^ Qe oQ wVg v Qe ^V' nT KUSK^ _USK_WUQg NL j f MuVgW_Uh UhT KR/he
^_e' nee_VUe v SI SIKOI Nb QU b Oj mcSIKO\ X ^_RK SK^ I Sb S/ RKY_eKS KNL kt z NL j f QU
QPPgZ SIK gQRhKRWSIKÉ ON VRPKVRSK^ Q SY_SZ PQRQT KSRe S/ SKf aNf i O T V^KgUh KWRSem
I JK RKY_eK^ NL kt z NL j f _ePRVY^K^ _Ui PPKU^y OM

f KY_eK^ ^VeKT V^KgUh WRNL kt z v Qe PKRWT K^ ne_Uh SIKT VeS' nRKUSYKR e_VU WSIKf aNf i O T V^KgM I JK oQ wWg T QKRQg [_U' gn^K Uh \ YKRonR KU L U_S st { c st Üc QU^ szz] QU^ NL kt z v KRK T V^KgK^ eKPKRQSKgZ v _SI _UPhS PQRT KSKR e ne_Uh SIK gORiKR WSIK É OÑ VR RKPVRSK^ Q SY_SZ ' VU' KUSQSVUeM f KY_eK^ f aNf i O T V^KgUh RkengSK^ _U Q UKSRKe_ ^nQg ^VeK WI' M á T RKT éz v _SI QU_U' RKOek^ ' QU' KR Rew WI' MäC sÇä WRSIK oQ wWg T QKRQg QU^ t Müt T RKT éz v _SI QU _U' RKOek^ ' QU' KR Rew WI' Mri sÇä WR SIK SKR J nU_SMI XV WRSIKR ^VeK T V^KgUh v Qe ^KSRT UK^ S/ oK RKOeVUQgKVRPRh^ KUSoQk^ VU SIK eK RkengSMI JK RKY_eK^ _UPhSPQRJ KSKR e QU^ ^VeKT V^KgQKR_U' gn^K U' SIKNL kt z NL j f PRVY^K^ _Ui PPKU^ y OM

q Qek^ VU QU KS PV SKUS_Qq ^ VeK Ww kí á T RKT éZ v _S_I QU _U RkQek^ ' QU KR ReW Ww Maç / sçäpc
NL kt z v Qe Rk^ VT T KU^K^ WRWKK RkQek^ KM

êéíëñ ¥ öf§ øø' fùtøþû

I JK f i N 'VU' nRK^ v _SI oQ wNgUh NL kt z VU uKoRnRZ sc1QÜc QU^ oQ wNgQ SY SKe v KRK
'VT PgKSK^ VU uKoRnRZ s{c1QÜM\ YKRnR KU L USe st { c stÜc QU^ szz v KRK neK^ S/ oQ wNg
NL kt z S/ hRQKc QU^ RVQ^ oQeK T QBRQ v Qe PgQK^ VYKR SIK oQ wNg SRKU JM i ^KSQK
^_e' nee_VU WSIK VYKRnR KU T QBRQ neK^ Qe oQ wNg_U NL kt z v Qe PRVY^K^ _U SIK wNg
NL j f [i PPKU^ y O] M

êé“ « < > fi fl∞ ï î < → + î fi †« êí

I RKU' J NhRKZ L US_t [NL kt] _e g' QSK^ eVnSI VWqn_g^_Uh r st QU^ KySKUe VRT É QUVgK
É mlÇr SIR/nhJ É QUVgKÉ mlQC QSSIK eVnSIv KeS' VRKRWSIKj QR Kg Okl PRPKRSZ oVnU^QRZ
QU^ SIKU SIRJ eUVRS nUsg SSKe _US/ NL kt z M NL kt] 'VT PReKe eS/RT ^RQU SIKU' J ekhT KUS
ç{ kOsl IçksN QU^ QPPRy_T QBgz s| { qUKRVMSVWes/RT ^RQU SIKU' J ekhT KUSç{ kOsl Içksi
[SIKRKT QU^KRWRSIKU' J ekhT KUSç{ kOsl Içksi eQeV' QSK^ v SI NL kt z] M

I JKWWSPRUSWNL ktI _e sI { M VMSOZ I r zIM VMSv _S I QS/QgenRQ KQRQWV QQC M exnQRK VMSM
I JK^KPSI WSIKKy' Q/QSK^ enRkZ nU SYQRK^ S/ QT Q/ T nT WIV VMSOKd/v hR/hU^ enRQ KM

êë“ëu < i £ ¶töö' fù¶p

ay' QYQS_{VU} Q SY_SK_e ' VT T KU' K^A VU X VYKT oKRTI ác I Ç{ c_U eS/RT ^RQU SKU' J eKhT KUS
Ç{ kOksl I Çksi QU^ v KRK ' VT PgSK^A WR NL kt^I VU É QRJ ác I ÇÜM X_UK SR_i' wg/Q'e WV
VYKR_nR_{KU} eV_g QU^ I z SR_i' wg/Q'e WWPKR_{PJK}Q_T QKR_Q v KRK SR_QW_MK^A S/ SIK f N[•] WR
PRV' Kee_Uh ^nR_Uh SIK NL kt^I Ky' QYQS_{VU} Q SY_SK_eM I QdK t K ge_S KQJ SR_i' wg/Q' WNL kt^I
T QKR_Q RKT VYK^Ac ^KUS_WKe SIK PKRP_JK_Q QU^ VYKR_nR_{KU} eS/ wP_gK ^KUS_WQS_{VU} UhT oKR
Qee_hUK^A oZ SIK f N[•] WR_{ST}Q w_Uh PhRPVeKec PRVY ^Ke SIK ^QK SIK T QKR_Q v Qe Ky' QYQ_B^Ac QU^
ge_S SIK VYKR_nR_{KU} eS/ wP_gK v JK_RK SIK PKRP_JK_Q T QKR_Q v Qe SR_QW_MK^A Q_QR FK' KY_Uh
f i N[•] 'VU' nR_{KU} KSI QSSIKT QKR_Q v Qe R_KQ^AZ WR' VUeVg ^QS_{VU} QU^ Q^A SVUgenRYKZ Q SY_SK_eM

a Q J g/Q¹ WPKRJPJKQ₂ T QKRQ₃ [s WWSW₄V_genFR/nH⁵_Uh KQ J P_PKV₆RT QWVgkj v Qe PgQ K⁷ VU
Qszk' no_ KZQR⁸ e' RKKU_Uh PQ⁹ QU¹⁰ v Qe QgjW K¹¹ S/ ^Kv QKR¹² Qe UK¹³ KeeQZMI JKT QKRQ₁₄PgQ K¹⁵ VU
KQ J PKRPJKRQ₁₆PQ¹⁷ v Qe RQ¹⁸_Vgjh_ QgZ e' QLUK¹⁹ ne_Uh QN n^gnt I t[] çks _UeSRnT KUSKxn_PPK²⁰ v _SI
Qzzksç PRVoKM v V eV_g eQT PgKe v KRK 'Vgk²¹ SK²² QU²³ QUQzpk²⁴ oZ hQTT QePK SRVe' VPZ QS SIK
VUke_SK g₂₅VROS/RZMI JK QUQzS'_Qg Rkeng₂₆ WRSIK NL k[] PKRPJKRQ₂₇T QKRQ₂₈ ^_ UVS_U²⁹ '_QSK SIK
PRKeKU' KWQ SY_SZ QoVYK SIK RkgQek₃₀ g_T SmuVgjW_Uh 'VU'nRKKU' KoZ SIKf i N cSIK RkgQek³¹
PKRPJKRQ₃₂T QKRQ₃₃eS/ wP_gKe v KRK 'VUeVg³⁴ QSK³⁵ VUS/ VYKRonR³⁶KU PQ³⁷e WR Q³⁸ _SVUQ₃₉ enR1KZ
Q SY_SK e VRv KRK SQJwMRR⁴⁰ S/ SIK eS/ wP_gK QRKQPKU⁴¹_Uh WM₄₂ SK⁴³ _ePveQgjok' QneK SIKR v KRK UV
QPPRVPRQSK VYKRonR⁴⁴KU PQ⁴⁵e Q/QgQdKS/ R⁴⁶K YKSIKPKRPJKRQ₄₇T QKRQ₄₈M

i PPRy_T QKgZ sár gUKQRVMSWP_PK QU^ É QUVdgKe É mlQC QU^ É mlCr v KRK RKT VYK^ VRVT NL kt|| QU^ v KRK eSQhK^ PKU^_Uh RQ^_VgMh^_Qj enRkZ Q SY_SKeM I JK T QVRsz WSIK P_PK Ky^ QYQK^ v Qe sI k_U JK^_QT KSKR^ VU^ RSKMI QdgKt kt geS QU^ Ke^ RoKe KQ J P_K^ KWky^ QYQK^ P PK QU^ SIKS^ VT QUVdgKe RKT VYK^ VRVT NL kt|| M

OnR_Uh SIK Ky' Q_QSVU Q SY_SKec_UenVV_KLSeK^_T KUSv Qe WhU^ _USKNL kt[] P_PKe S/ enoT_SS/
SIK VUke_SK gQoVROS/RZ WR QUQ_Ze_eä JW KYKR el^_T KUS eQT PgKe v KPK 'VggK SK^ VRVT É QUVgK
É mlQC_Qu^ É mlCr_Qu^ v KPK enoT_SK^ S/ SIK VUke_SK gQoVROS/RZ WR QUQ_Ze_e oZ hQT T Q
ePK SRVe VPZM I JK QUQ_ZS_ Qg Rkengs_U^_QK^ SIK PRKeKU' K WQCMt l t s Pb_éh „ „ b e_UÉ QUVgK
É mklCr [{j OÉ msl sNkCr ksCzICs] M i gSVnhJ UV KgKYQK^ QSY_SZ v Qe ^KUSWK^ _U SIK
el^_T KUS eQT PgK 'VggK SK^ VRVT É mlQCc_S v Qe PgQ K^ _U RQ_Vg/h_ Qg v QeSK_o_U
Ä uNLQCsssl Ä s ^nK S/ Q' VT T nU_ QSVU KRRVRMÉ QUVgKÉ mlCr v Qe PgQ K^ _U RQ_Vg/h_ Qg
v QeSKo_Uq» f LCI {t Ct O QSSIK^ Rk SVUWSIKf N oQek^ VUSIK KgKYQK^ „ „ b e Q SY_SZM

dJ Q 'VR QU' K v _SI SIK NKv KR~ VRw j gQU [I Sab 1QQ{ o]c Q S/SQg Wf s _UYKeShQS^YK eQT PgK
v KRK 'VggK SK^ QjUh SIK SKU' J oVSS/T ^nK S/ SIK KgKYQSK^ ,,"b e Q SY SZ _U SIK eK^ T KUS
eQT PgK 'VggK SK^ VR/T É QUjVgk É mlçr M I J_e _UWRT QS^VU _e PRKeKUSK^ _U SIK WUQ NLj f
PRAY^K^ _U i PPKU^ y OM I JK Rkeng^S WMSIK _UYKeShQS^YK eQT PgK QUQzpk^ _KUS^WK^ ..%f Q
'VUSQT _UQS^VU QSU UK eQT PgK PV_U^S RQjh_Uh VR/T sIMÜQI S/t M^rzt Pb_éh MXV KgKYQSK^ ,,"b e
Q SY SZ v Qe _KUS^WK^ _U SIK SKU' J nU SM f KT K^ QS^VU WVI sIM 'no_ ZQR^E WWeV_g v Qe

PKRWRT K^c QU^ QU Q^SVUQj || ' JQRQ SKpQSV eQT PgKe v KRK ' Vgk SK^ MI JK QUQZS' Qg Rkengs
_U^ _QSK^ SISRKT K^QSVv Qe Rkxn_RK^ QR/hU^ S V eQT PgK PV_US ^nKS/ KgKYQSK^ ..%f QQ SY_SZ
_KUSWK^ QS sMá{ár QU^ sMázür Pb_éhM uVnRPVeSRT K^QSVe eQT PgKe v KRK ' Vgk SK^ c QU^ SIK
QUQZS' Qg Rkengs ejW K^ KgKYQSK^ ..%f QQ SY_SZ QSI M{á{r Pb_éhMi ^SVUQgRKT K^QSV WNSIK
' VUSQT_USK^ eV_g v Qe PKRWRT K^c QU^ WhR PvEsRT K^QSV eV_g eQT PgKe v KRK ' Vgk SK^ M
I JK QUQZS' Qg Rkengs _U^ _QSK^ SIK PRKeKU' K WV.%f Q QS sMá{r Pb_éhM uVgjv_Uh WRSIKR
RKT K^QSVuc WhR Q^SVUQg PvEsRT K^QSV eQT PgKe v KRK ' Vgk SK^ M I JK QUQZS' Qg Rkengs
_U^ _QSK^ SIK PRKeKU' K WVgKYQSK^ ..%f QQ SY_SZ_U SIRK WNSIK WhReQT PgKe QSSM Üst csMá{r c QU^
t M{á{r Pb_éhM uVgjv_Uh RKT K^QSVuc SIRK PvEsRT K^QSV eQT PgKe v KRK ' Vgk SK^ c QU^ SIK
QUQZS' Qg Rkengs ^ ^ UVS_U^ _QSK SIK PRKeKU' K WVgKYQSK^ Q SY_SZ M I JK uNN eQT PgK g/QSVje
v KRK PgVsK^ QU^ eV_g eQT PgKe v KRK ' Vgk SK^ MI JK QUQZS' Qg Rkengs ^ ^ UVS_U^ _QSK SIK PRKeKU' K
WVgKYQSK^ Q SY_SZ c QU^ UV WRSIKR RKT K^QSVje v KRK UK KeeQZM u_hnRK sI ejW e SIK
KgKYQSK^ Q SY_SZ eQT PgK g/QSVje _NL ktI PRVRS/oK Uh RKT K^QS^K M

f Q_Vgh_ QgenRKZe v KRKPKRWRT K^ VUSIKNL kt P_PKMj _PKeKhT KUSC{ KOsl IÖÇksNkzs ejW K^
KdKYQSK^ eSS^ T KQenRKT KUSC^ nRUh SIKenRKZ Q SY_SKeMi evG^ P_K KWSI_e P_PK eKhT KUSv Qe
'VgjK SK^ QU^ enoT_SK^ S/ SIK VUke_SK gQVRQS/PZ WRzNRQUZe_e [{j Oj dsl sNIÇzskt l zlÇs] _U
'VUWRT QU' Kv_SI SIK ~ VRw dJesR^ SVUM q Qek^ VU SIK RKengec P_PK eKhT KUSC{ KOsl IÖÇksNkzs
v Qe RKdQek^ WRUMURQ_Vgh_ Qgv QSK^ ePVeQgQSSIK^ RK^ SVU WSIKf N M

I QoGK t kt geSe KQJ Ky' QYQSK^ NL kt P_PK eKhT KUS_ ^KUSWKe SIK ^QSK_S v Qe enRYKZK^ c QU^ PRVY_ ^Ke SIK QeeV_ QSK^ RQ^ Vgjh_ 'QgenRYKZ RKPVRs ^KUSW QSVU UhT oKRMi sQC PKR KUSenRQK e QU v Qe PKRMRT K^ VU KQJ P_PK eKhT KUSMdJ Q^ ^ SVUcS_ V eSS_ T KQenRKT KUS_ v KRK RK^ VRK^ c QU^ S_ V ev _PK eQT PgKe v KRK 'VgjK SK^ QU^ enoT SK^ S_ SIK VUke SK gOVRQS/RZ WR QUZe eM I JKEnRYKZ RKege QRK PRVY_ ^K^ _Ui PPPKU^ y uM

q Qk^ VUSIK EnR/KZ RkengcsSKf N 'VU' nFRK^ SJQSSIK sár g_UKQRWKSWP_PK 'Vng' oK RkdQk^ WRUMURQ_VgMh_ 'Qj ^_ePVeQMI JK P_PK v Qe SQuelMRK^ WMa_SK oZ SIK O\ X}e UMURQ_VgMh_ 'Qj v QeSK 'VUSQ S/RM

êë“ë i i iëí ‘ò~ò~ < j £ öòòò~ ò~ ‘òòf

I JK_RK_e UV wUV U eS/RT ^RQU VR eQU_SQZ ekV KRP_PK QeV'_QS^ v _SI NL ktI RKT QU_Uh _U
j QR KgOk M

ēē“@ i i īēí óððöö i ððññ i ñüþ i ç i ñ£ £ öüç

I JK RQ_VgMh_ 'Qj v VRv PKRWRT K^ WR NL kt[] _U' gne_YK VWSIK SKU' J QU^ oQ wMg T QKRQg
'VT PRek^ WMYKRonR KU eV_gc QU^ _T PVRK^ Wg T QKRQg v Qe ^V'nT KUSK^ _U SIK WUQg NL j f M
uVgWv Uh UhT KRV/he ^ e' nee VUe v SI SIK OI Nb QU^ bOj mc SIK OI X ^ RK SK^ I Sab S/ RKY eK

S IK NL kt NL j f QU[^] QPPQZ S IK g Q RIKR W S IK É O Ñ VR RKPVRK[^] Q SY SZ PQQT KSKR[^] S/ S IK f a Nf i O T V[^] Kg Uh KWWR[^] MI JK RKY_eK[^] NL kt NL j f _e PRVY_ ^K[^] _Ui PPKU[^] y OM

f KY_eK^ ^VeKT V^KgUh WRNL kt] v Qe PKRWRT K^ ne_Uh SIKT VeS' nRKUSYKR_eVUWSIKf aNf i O T V^KgMI JK oQ wMg T QSKRQg [U^ gr^_Uh \ YKRonR'KUL U_Sz szz QU^ sÜI QU^ _TPVRSK^ Wg QU^ NL kt] v KRKT T V^KgK^ eKPCQRSKz v _SI _UPhSPQRJT KSKR_e ne_Uh SIK gQRKRWMSIKÉ OÑ VRKPKVRSK^ Q SY_Sz 'VU' KUSRSVUeM f KY_eK^ f aNf i O T V^KgUh RKengSK^ _U Q UKSRKe^nQg ^Vek Wwz MzÜ T RKT éZ v _SI QU_U^ RKQeK^ 'QU' KRRew WÜIM á sçä WRSIK oQ wMg T QSKRQg QU^ t Mr T RKT éZ v _SI QU_U^ RKQeK^ 'QU' KRRew WÜIM á sçä WRSIK SKU J nU_SMXV WRSIK^ VeKT T V^KgUh v Qe ^KSKRT _UK^ S/oK RKQeVUQdgKVRPRh^KUSoQeK^ VU SIK eK RKengSMI JK RKY_eK^ _UPhSPQRJT KSKR_e QU^ ^VeKT V^KgQRK U^ gr^K^ USIKNL kt] NL i f PRVY^K^ Ui PPKU^ y OM

q Qek^ VU QU KSPVSKUSQj ^VeK Wl MzÜ T RKT éZ v _SI QU_U^ RQek^ ' QU KR ReW WÜ M á u sçäpc
NL ktI v Qe RK^ VT T KU^K^ WRWKK RQek^ KM

êe“ණ ￥ ö/§ ණ' fùtàbú

I JK f i M 'VU^nRK^ v _SI oQ wNgUh NL kt] VU ^nUK ssc lQGÜc QU^ oQ wNg Q SY_SKe v KRK
'VT PgSK^ VU ^nUK sl c lQGÜM \ YKRnRKU L USe szz QU^ sÜl QU^ QVnSItl 'no_ ZQR'e VW
_T PVRK^ WNgv KRK nek^ S/ oQ wNg NL kt] S/ hRQ^Kc QU^ R/Q^ oQKT QBRQgv Qe PgQ^K VYKRSIK
oQ wNg^ SRKU J MOKSgk^ ^_e' nee_VuE Rkgk^ S/ SIK_T PVRK^ QU^ VYKnRKU T QBRQge nek^ Qe
oQ wNg_U NL kt] QRK PRVY^K^ _U SIK WUQg NL j f [i PPKU^y O] M I JK RQgMh'_Qg QQOZS'Qg
RKengg WRSIK_T PVRK^ WNgT QBRQg QRK PRVY^K^ _U SIK WUQg NL j f i [i PPKU^y b] QU^ SIK
'JKT 'QQOZS'Qg RKengg QRK PRVY^K^ ui PPKU^y a M

I JK PRKeKU' KW,, „b e_UÉ QUVgKÉ mlÇr ek^_T KUS_e ' VUe_SKUSv_SI SIK ' VU' KPSIQe_SKT V^Kg
WRSIK RQ_Vg/h_`QgZ_T PQ SK^ eS/RT ^RQU QU^ eQU_SQRZ ekv KReM q QeK^ VU SIK J_eS/RZ VWSIK
mj XN ekv KReZeSKT cSIKRK_e PVSKUSQgWRKgKYQSK^ RQ_VQ SY SZ _U P_P_Uh ek^_T KUSoK QneK SIK
eS/RT ^RQU QU^ eQU_SQRZ ekv KRe v KRK Q ' VT o_UK^ eZeSKT M dJ hUKURQc SIK _KUSW_QSVU VW
KgKYQSK^ Q SY SZ _U P_PKe VRT QUVgKe _e UVS UK KeeQRgZ ^KPKU^KUS VU SIK J_eS/R' Qg neK VR
eS/RQIK WRQ_VQ SY KT QSR_Qg QSSIK UKQRKeSRQ_Vg/h_`QgZ_T PQ SK^ QRQ_QSmj XN Qe SIK eS/RT
^RQU QU^ eQU_SQRZ ekv KR eZeSKT e JQ/YK oKKU T V^_WK^ QU^ RKPQRK^ SIR/nhJVhSS SIK ZKQRc QU^
VW PQSKRjeT QZ JQ/YK ' JQUhK^ M

êë « < > fi flo ï î < → þ î fi þ« ê”

I R_KU J NnR_KZ L U_St r [NL k t r] _e g/ Q_K^ Q|Q KUSS/ S_KeVnSI e^KWq n_g^_Uh r st QU^ R_KUe P_KR_KgS/ S_KeVnSI KRU j QR KgOKl PR_KP_KRZ oVnU^ Q_KZM_KS_KU^ e_VRT S_KeVnSI KQ_KS' VR_KR_KW q n_g^_Uh r st v JK_K_S' VUUK S/ NL k t I QU^ I R_KU J NnR_KZ L U_Sst[] v KeS QR S/ É QU_KVgK É mlÇr v JK_K_S' VUUK S/ NL k t[] [u_hnR_Kskz] MNL k t r ' VT PR_KeS/RT ^R_KU S_KU J eKhT KUS C_K kOsl K_KCksf QU^ kr b c QU^ eQu S_KZ eKv KRS_KU J eKhT KUS C_K kOsl K_Kkr O MX K_KreS/RT ^R_KU